AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

1. (Previously Presented) An implantable device comprising:

a housing to be secured to a patient's bone;

one or more components mounted in the housing; and

at least one osseointegrating protuberance extending from a surface of the housing.

2. (Previously Presented) The implantable device of claim 1, wherein the housing surface from which the at least one osseointegrating protuberance extends comprises a housing surface adapted to abut the patient's bone.

3. (Previously Presented) The implantable device of claim 1, wherein the housing surface from which the at least one osseointegrating protuberance extends comprises a housing surface adjacent to a housing surface adapted to abut the patient's bone.

4. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance extends from the housing toward the bone when the device is in an implant orientation adjacent the bone.

5. (Previously Presented) The implantable device of claim 4, wherein the at least one osseointegrating protuberance comprises two osseointegrating protuberances having longitudinal axes that lie in a same plane at opposing angles relative to an implant axis substantially orthogonal with an abutting housing surface and the bone surface.

6. (Previously Presented) The implantable device of claim 5, wherein the opposing angles between the longitudinal axes of the osseointegrating protuberances and the implant axis are each approximately between 5 and 85 degrees.

7. (Previously Presented) The implantable device of claim 1, wherein the tissue-stimulating prosthesis is a cochlear prosthesis.

8. (Previously Presented) The implantable device of claim 7, wherein the housing and the one or more components comprise a stimulator unit of the cochlear implant.

9. (Previously Presented) The implantable device of claim 8, wherein a receiver antenna is operatively connected to the housing, and wherein the housing and the one or more components comprise a stimulator receiver unit of the cochlear prosthesis.

10. (Previously Presented) The implantable device of claim 1, wherein the implantable device is configured to be secured to the bone in a periosteal pocket formed in the bone.

11. (Previously Presented) The implantable device of claim 1, wherein the bone is a skull bone.

12. (Previously Presented) The implantable device of claim 11, wherein the periosteal pocket is formed in a mastoid process.

13. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance is configured to be permanently implanted in the patient's bone.

14. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance is configured to be extricated from the bone subsequent to osseointegration.

15. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance is configured to prevent significant relative lateral movement between the implanted device and the patient's bone.

16. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance comprises at least one loop member.

17. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance comprises at least one aperture.

18. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance comprises at least one substantially smooth shaft.

19. (Previously Presented) The implantable device of claim 18, wherein the at least one substantially smooth shaft comprises a plurality of substantially smooth shafts each having a longitudinal axis, wherein the longitudinal axes of the shafts lie in different planes.

20. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance comprises at least one threaded shaft.

21. (Previously Presented) The implantable device of claim 20, further comprising at least one elongate flange extending from the housing in a direction substantially parallel with the bone when the device is in an implantable position, and wherein each of the at least one threaded shaft is operationally disposed on one of the at least one flange so as to be laterally offset from the housing.

22. (Previously Presented) The implantable device of claim 21, wherein the at least one laterally offset threaded shaft is configured to be manipulated to extricate the shaft from the bone subsequent to osseointegration.

23. (Previously Presented) The implantable device of claim 22, wherein the at least one laterally offset threaded shaft is a screw.

24. (Previously Presented) The implantable device of claim 21, wherein the at least one elongate flange and housing surfaces are non-osseointegrating.

25. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance comprises at least one fastening member mounted to a support.

26. (Previously Presented) The implantable device of claim 25, wherein the at least one fastening member comprises one or more of the group consisting of:

a screw;

a clip; and

a nail.

27. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance is formed of or coated with one of either titanium or titanium alloy.

28. (Previously Presented) The implantable device of claim 1, wherein the at least one osseointegrating protuberance has a surface treatment that encourages osseointegration.

29. (Previously Presented) The implantable device of claim 1, wherein the housing is coated with a material that prevents osseointegration.

30. (Previously Presented) The implantable device of claim 29, wherein the housing is formed of a material coated with a biocompatible silicone.

31. (Previously Presented) The implantable device of claim 29, wherein the housing is formed from at least one of a biocompatible metallic, ceramic and polymeric material.

32. (Previously Presented) A tissue-stimulating prosthesis comprising:

an implantable stimulator unit comprising:

a housing to be secured to a patient's bone;

one or more components mounted in the housing; and

at least one osseointegrating protuberance extending from a surface of the housing toward the bone when the device is in an implant orientation adjacent the bone.

33. (Previously Presented) The prosthesis of claim 32, wherein the tissue-stimulating prosthesis is a cochlear implant, and wherein the bone is a skull bone of the patient.

34. (Previously Presented) The prosthesis of claim 32, wherein the stimulator unit is configured to be secured to the bone in a periosteal pocket formed in the bone.

35. (Previously Presented) The prosthesis of claim 32, wherein the housing surface from which the at least one osseointegrating protuberance extends comprises a housing surface adapted to abut the patient's bone.

36. (Previously Presented) The prosthesis of claim 35, wherein the at least one osseointegrating protuberance comprises two osseointegrating protuberances having longitudinal axes that lie in a same plane at opposing angles relative to an implant axis substantially orthogonal with an abutting surface of the housing and the bone surface.

37. (Previously Presented) The prosthesis of claim 36, wherein the opposing angles between the longitudinal axes of the osseointegrating protuberances and the implant axis are each approximately between 5 and 85 degrees.

38. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance is configured to be extricated from the bone subsequent to osseointegration.

39. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance is configured to prevent substantial relative lateral movement between the implanted device and the patient's bone.

40. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance comprises at least one loop member.

41. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance comprises at least one aperture.

42. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance comprises at least one substantially smooth shaft.

43. (Previously Presented) The prosthesis of claim 42, wherein the at least one substantially smooth shaft comprises a plurality of substantially smooth shafts each having a longitudinal axis, wherein the longitudinal axes of the shafts lie in different planes.

44. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance comprises at least one threaded shaft.

45. (Previously Presented) The prosthesis of claim 44, further comprising at least one elongate flange extending from the housing in a direction substantially parallel with the bone when the device is in an implantable position, and wherein each of the at least one threaded shaft is operationally disposed on one of the at least one flange so as to be laterally offset from the housing.

46. (Previously Presented) The prosthesis of claim 45, wherein the at least one laterally offset threaded shaft is configured to be manipulated to extricate the shaft from the bone subsequent to osseointegration.

47. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance comprises features that facilitate osseointegration.

48. (Previously Presented) The prosthesis of claim 45, wherein the at least one elongate flange is non-osseointegrating.

49. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance comprises at least one fastening member mounted to a support.

50. (Previously Presented) The prosthesis of claim 49, wherein the at least one fastening member comprises one or more of the group consisting of:

a screw;

a clip; and

a nail.

51. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance is formed of one of either or titanium alloy.

52. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance is coated with one of either titanium or titanium alloy.

53. (Previously Presented) The prosthesis of claim 32, wherein the at least one osseointegrating protuberance has a surface treatment that encourages osseointegration.

54. (Previously Presented) The prosthesis of claim 32, wherein the housing is coated with a material that prevents osseointegration.

55. (Previously Presented) The prosthesis of claim 54, wherein the housing is formed of titanium coated with a biocompatible silicone.

56. (Previously Presented) The prosthesis of claim 54, wherein the housing is formed from at least one of a biocompatible metallic, ceramic and polymeric material.

57. (Previously Presented) A housing for an implantable device to be secured to a patient's bone, comprising:

at least one osseointegrating protuberance extending from one or more surfaces of the housing adapted to abut the patient's bone, wherein the at least one osseointegrating protuberance is configured to be extricated from the bone subsequent to osseointegration.

58. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance extends from the housing toward the bone when the device is in an implant orientation adjacent the bone.

59. (Previously Presented) The housing of claim 58, wherein the at least one osseointegrating protuberance comprises two osseointegrating protuberances having longitudinal axes that lie in a same plane at opposing angles relative to an implant axis substantially orthogonal with an abutting surface of the housing and the bone surface.

60. (Previously Presented) The housing of claim 59, wherein the opposing angles between the longitudinal axes of the osseointegrating protuberances and the implant axis are each approximately between 5 and 85 degrees.

61. (Previously Presented) The housing of claim 57, wherein The housing is a component of a tissue-stimulating prosthesis.

62. (Previously Presented) The housing of claim 57, wherein the tissue-stimulating prosthesis is a cochlear implant.

63. (Previously Presented) The housing of claim 62, wherein the one or more components mounted in the housing function as a stimulator unit of the cochlear implant.

64. (Previously Presented) The housing of claim 57, wherein The housing is configured to be secured to the bone in a periosteal pocket formed in the bone.

65. (Previously Presented) The housing of claim 57, wherein the bone is a skull bone of the patient.

66. (Previously Presented) The housing of claim 65, wherein the periosteal pocket is formed in a mastoid process.

67. (Previously Presented) The housing of claim 65, wherein the at least one osseointegrating protuberance is configured to prevent substantial relative lateral movement between the implanted device and the patient's bone.

68. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance comprises at least one substantially smooth shaft.

69. (Previously Presented) The housing of claim 68, wherein the at least one substantially smooth shaft comprises a plurality of substantially smooth shafts each having a longitudinal axis, wherein the longitudinal axes of the shafts lie in different planes.

70. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance comprises at least one threaded shaft.

71. (Previously Presented) The housing of claim 70, further comprising at least one elongate flange extending from the housing in a direction substantially parallel with the bone when the device is in an implantable position, and wherein each of the at least one threaded shaft is operationally disposed on one of the at least one flange so as to be laterally offset from the housing.

72. (Previously Presented) The housing of claim 71, wherein the at least one laterally offset threaded shaft is configured to be manipulated to extricate the shaft from the bone subsequent to osseointegration.

73. (Previously Presented) The housing of claim 69, wherein the at least one laterally offset threaded shaft is a screw.

74. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance comprises at least one fastening member mounted to a support.

75. (Previously Presented) The housing of claim 74, wherein the at least one fastening member comprises one or more of the group consisting of:

a screw;

a clip; and

a nail.

76. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance is formed of one of either or titanium alloy.

77. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance is coated with one of either titanium or titanium alloy.

78. (Previously Presented) The housing of claim 57, wherein the at least one osseointegrating protuberance has a surface treatment that encourages osseointegration.

79. (Previously Presented) The housing of claim 57, wherein the housing is coated with a material that prevents osseointegration.

80. (Previously Presented) The housing of claim 79, wherein the housing is formed of titanium coated with a biocompatible silicone.

81. (Previously Presented) The housing of claim 79, wherein the housing is formed from at least one of a biocompatible metallic, ceramic and polymeric material.

82. (Previously Presented) An implantable device comprising:

housing means for housing one or more components; and

means for osseointegrating by securing the housing means to a patient's bone.

83. (Previously Presented) The implantable device of claim 82, wherein the osseointegrating means comprises at least one osseointegrating protuberance.

84. (Previously Presented) The implantable device of claim 83, wherein the at least one osseointegrating protuberance extends from the housing toward the bone when the device is in an implant orientation adjacent the bone.

85. (Previously Presented) The implantable device of claim 84, wherein the at least one osseointegrating protuberance comprises two osseointegrating protuberances having longitudinal axes that lie in a same plane at opposing angles relative to an implant axis substantially orthogonal with an abutting housing surface and the bone surface.

86. (Previously Presented) The implantable device of claim 85, wherein the opposing angles between the longitudinal axes of the osseointegrating protuberances and the implant axis are each approximately between 5 and 85 degrees.

87. (Previously Presented) The implantable device of claim 82, wherein the tissue-stimulating prosthesis is a cochlear prosthesis.

88. (Previously Presented) The implantable device of claim 87, wherein the housing and the one or more components comprise a stimulator unit of the cochlear implant.